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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,170	10/06/2003	David Joseph Kropaczek	24GA6001	2278
33727	7590	08/05/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			CRAIG, DWIN M	
			ART UNIT	PAPER NUMBER
			2123	

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/678,170

Applicant(s)

KROPACZEK ET AL.

Examiner

Dwin M. Craig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 33 and 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 19-22, 24 and 32 is/are rejected.
- 7) ☒ Claim(s) 4-18, 23 and 25-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-32 have been presented for reconsideration based on Applicants' arguments.
2. Dwain M. Craig is the current Examiner of record. Eduardo Garcia Otero is no longer the Examiner of record.

#### Response to Arguments

3. Applicants' arguments presented in the 5-17-2005 responses have been fully considered. The Examiner's response is as follows.

- 3.1 Regard the Applicants' response to the 35 USC 112 second paragraph rejections of claim 4, Applicants' argued, *on pages 10 & 11 of the 5-17-2005 responses,*

*"In context, it is clear that the Applicant uses language might be to list specific examples. The Applicant gives numerous examples of potential fuel bundle pedigree designations. For example, the phrase "[a] pedigree attribute might be 'RU' and 'RP' for reconstitution with uranium rods, respectively" means that if a fuel bundle is reconstituted with uranium rods the pedigree attribute is 'RU' and if the fuel bundle is reconstituted with phantom rods the pedigree attribute is 'RP' (pages 21-22 of the specification.)"*

The Examiner has found this argument to be persuasive and withdraws the 35 USC § 112 rejections of claim 4.

- 3.2 Regarding the Applicant's response to the 35 USC § 102(b) rejections of claims 19 and 32, Applicants' argued, *page 12,*

*"Applicant respectfully submits that Glasstone cannot disclose or suggest "populating a loading map with fuel bundles stored in at least one fuel pool" as recited in claim 19 and "using nuclear*

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*fuel bundles residing in at least one fuel pool in a new loading map” as recited in independent claim 32.”*

The Examiner has found this argument persuasive and withdraws the 35 USC § 102(b) rejections of claims 19 and 32.

**3.3** Regarding the Applicant’s response to the 35 USC § 103(a) rejections of the remaining claims.

The Examiner notes that Applicant’s have argued that none of the cited prior art discloses the requisite disclosed limitations of a having a loading map of fuel rods, for this reason the Examiner withdraws the earlier rejections of the claims.

**3.4** An updated search has revealed new art.

**Oath/Declaration**

**4.** The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application-by-application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It was not executed in accordance with either 37 CFR 1.66 or 1.68.

More specifically, please see 37 CFR 1.63 (a) (1) which states that the oath must be executed, *i.e.* *signed*.

**4.1** The Examiner notes that not all of the inventors have signed the Oath, specifically, CAREY REID MERRITT, CHRISTIAN CARLOS OYARZUN and JOHN DEAN FULLER have not signed the oath.

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1, 2, 3, 19, 20, 21, 22, 24 and 32 are rejected under 35 USC 103(a) as being unpatentable over US Patent 5,793,636 Cooney et al. in view of US Patent 5,949,837 Radkowsky.

5.1 As regards independent claims 1, 19 and 32 and dependent claim 20 and using claim 1 as an example, the *Cooney et al.* reference discloses, *A method of facilitating recovery of nuclear fuel from a nuclear fuel pool.* (Figure 2 and ABSTRACT, note the description of a fuel management system. TITLE fuel recovery is the part of fuel management in a nuclear power plant), and a *user interface* (Figure 1 items 16A, 14A, 18A, 16B, 14B, 16C, 18B and 14C all of the computers have a user interface).

However, the *Cooney et al.* reference does not expressly disclose *a loading map with fuel bundles.*

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The *Radkowsky* reference discloses a loading map (Figures 5.1-5.9 and Col. 6 lines 17-19 and Col. 11 lines 8-32), with fuel bundles (Figures 7 and 8 and Col. 6 lines 24-30).

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to have provided a graphical user interface to the methods of Nuclear Fuel Management because, of the advantages of ease of use of a GUI, which is extensively employed in the computer art, and the way in which safety would be enhanced by presenting an easy to use interface for a user to manipulate nuclear fuel rods, which are very hazardous materials.

5.2 As regards dependent claims 2, 21 and 24 the *Cooney et al.* reference discloses a fuel management database (Col. 2 lines 23-31).

5.3 As regards dependent claims 3 and 22 the *Cooney et al.* reference discloses a database with attributes (4, 5A and 5B).

#### Allowable Subject Matter

6. Claims 4-18, 23 and 25-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

7. Claims 1-32 have been presented for Examination. Claims 1-3, 19-22, 24 and 32 have been rejected. Claims 4-18, 23 and 25-31 have been objected to. This Office Action is Non-Final.

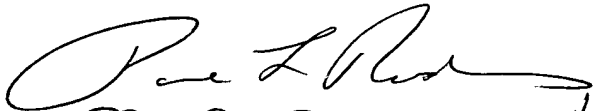
7.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwain M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC

  
Paul L. Rodriguez 8/3/05  
Primary Examiner  
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